

ABSTRACT OF THE DISCLOSURE

5

10

15

Provided is an anode for use in electrochemical cells, wherein the anode active layer has a first layer comprising lithium metal and a multi-layer structure comprising single ion conducting layers and polymer layers in contact with the first layer comprising lithium metal or in contact with an intermediate protective layer, such as a temporary protective metal layer, on the surface of the lithium-containing first layer. Another aspect of the invention provides an anode active layer formed by the in-situ deposition of lithium vapor and a reactive gas. The anodes of the current invention are particularly useful in electrochemical cells comprising sulfur-containing cathode active materials, such as elemental sulfur.

T06250"0694960